

Date: Fri, 7 Oct 94 04:30:16 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: List
Subject: Ham-Digital Digest V94 #332
To: Ham-Digital

Ham-Digital Digest Fri, 7 Oct 94 Volume 94 : Issue 332

Today's Topics:

continuous data transfer over +/- 2 miles (2 msgs)
 HTX-202 to TNC
Is there a cheap 1200baud link out there? (2 msgs)
 NOARY Software
 NOS versions (2 msgs)
 Remote Wind Speed Measurement
 Source for TEKK XCVR
 Tekk KS900 pinouts
 THENET X1J2
 TNC to HTX-202 (2 msgs)
Wanted: Montreal CA Packet group (2 msgs)
Windows software for Kantronics Kam+

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 05 Oct 1994 22:19:07 -0400
From: martin.ewing@yale.edu (Martin Ewing)
Subject: continuous data transfer over +/- 2 miles

In article <stephenh.34.002C746A@autonomous.com>, stephenh@autonomous.com
(Steve Hochschild) wrote:

> I need to send a continuous data stream at about 1200 baud over a distance of
> about 2 miles.
>
> I am trying to instrument an amateur race car and send real time telemetry

> back to the pits. I am a total novice on this, but someone told me packet
> radio would be a way to go. After reading the FAQ, I don't think that this is
> so, rather, I think I need some other form of digital transmission...

1200 bps packet will not achieve 1200 bps data throughput. The protocols are designed for reliability, general addressing, and packet switching through multiple networks, etc. In your case, depending on the reliability you require and assuming you want only point to point communication, you might get by with continuously modulating your data stream at 1200 bps using one of the common modem configurations, and demodulating at the receiver without AX.25 or tcp/ip protocols. Probably you would want to include synchronizing and checksum bits.

73

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Martin Ewing, Yale University Science & Engineering Computing Facility
AA6E martin.ewing@yale.edu, 203-432-4243, 203-432-2797 (fax)
URL: <http://www.cis.yale.edu>; "vincit omnia celeritas"

Date: Thu, 6 Oct 1994 20:24:34 UNDEFINED
From: stephenh@autonomous.com (Steve Hochschild)
Subject: continuous data transfer over +/- 2 miles

>> I need to send a continuous data stream at about 1200 baud over a distance
of >> about 2 miles.
>> I am trying to instrument an amateur race car and send real time telemetry
>> back to the pits. I am a total novice on this, but someone told me packet
>> radio would be a way to go. After reading the FAQ, I don't think that this is
>> so, rather, I think I need some other form of digital transmission...

> you might get by with continuously modulating your data stream at 1200 bps
> using one of the common modem configurations, and demodulating at the
> receiver without AX.25 or tcp/ip protocols. Probably you would want to
> include synchronizing and checksum bits.

Thanx for the response. Can you give me any specific recommendations for one
of the common modem configurations? As an amateur effort, we are resource
limited, of course...

I should have made it clear that we don't know anything about radio, either,
so do you have any recommendations there ???

We are using a purpose-built protocol, and have both ends well under way,
but we don't know how to hook them together yet.....

Date: Wed, 5 Oct 1994 20:01:24 GMT
From: dara@physics.att.com (Shel Darack)
Subject: HTX-202 to TNC

I have an HTX 202 connected to a KAM for packet. The KAM manual gives instructions for an ICOM 2AT and also a Yaesu. The difference between these is that the ICOM requires a 3.9 K resistor in series with the PTT line and Yaesu requires 2.2 K. The HTX 202 must be wired with a 2.2 K resistor which is the same as YAESU. I don't remember the capacitor recommended in series with the tnc audio to the HT. Both the resistor and the capacitor are connected to the connector tip. You don't need the ring if you use a stereo connector. The sleeve is ground.

Shel WA2UBK

Date: Tue, 04 Oct 1994 10:46:33 -0400
From: CSLE87@email.mot.com (Karl Beckman)
Subject: Is there a cheap 1200baud link out there?

In article <southagr.5.006D50B7@caedm.et.byu.edu>,
southagr@caedm.et.byu.edu (Gordon R. Southam) wrote:

> I am looking for a low cost solution to radio linking low speed serial data.
> 1200 baud is fine, slower might be ok. I want to transmit from a metering
> station to an IBM about 1/2 to 2 miles away. I know that running cable would
> be simpler, but isn't very practical in my case.
> I am looking into building my own Tx/Rcv pair, probably with the NE605,
> or MC3367 Rcvr, and a cookbook Tx, but since my experience is more in digital
> and less in radio, I'm having trouble rounding up the pieces the app. notes
> example circuits recomend. Digi-Key, Mouser etc. just don't seem to
> "do" radio. If someone has built such a pair, or if such is commercially
> available, I'd like to purchase rather than build. Alternatively, source
> recomendations (for the coils, filters etc.), proven schematics, advise, etc.
> would be very helpful.
> Also, I've read chunks of CFR 47, and get the impression that 49Mhz would
> be the easiest freq. to deal with, but I would like to get my hands on a
> layman's guide to the subject. Does the ARRL publish anything specific to my
> type of project?
> Thanks in advance,
> Gordon Southam
> southagr@caedm.et.byu.edu

Since you've read CFR47, Pt15 you should by now be aware of the power and

antenna limitations imposed in the 49 MHz band, and also that your proposed device MUST be type-accepted by the FCC before you can legally operate it on the air. 49 MHz is NOT an experimenter's band!

If you've tried to make a cordless phone talk two miles you'll have already verified that the signal is not strong enough to overcome the path losses and environmental interference in this frequency window. On the other hand, if you haven't looked at the path and need a quick test setup, try that hardware before you invest any hard cash and development time into your project.

There are many standard commercial units on the market which will fulfill your needs. Some even go up to 9600 baud and are made in the USA, but this is NOT a commercial. Even the US Department of Defense is now required to buy "off-the-shelf" rather than going custom and creating the \$600 hammer. There are several slogans that apply to your situation, including "Support the economy," "Buy American," "Just do it," and "Don't re-invent the wheel."

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Karl Beckman, P.E.	<	If our English language is so	>
Motorola LMPS.RNSG.Analog Data	<	precise, why do you drive on the	>
(Square waves & round corners)	<	parkway and park on the driveway?	>
Opinions expressed here do not belong to or represent Motorola Inc.			
Amateur radio WA8NVW		NavyMARS NNN0VBH @ NOGBN.NOASI	

Date: 6 Oct 1994 16:40:15 -0700
From: dzubey@news.enet.net (Dan Zubey)
Subject: Is there a cheap 1200baud link out there?

Gordon R. Southam (southagr@caedm.et.byu.edu) wrote:
: I am looking for a low cost solution to radio linking low speed serial data.
: 1200 baud is fine, slower might be ok. I want to transmit from a metering
: station to an IBM about 1/2 to 2 miles away. I know that running cable would
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: example circuits recomend. Digi-Key, Mouser etc. just don't seem to
: "do" radio. If someone has built such a pair, or if such is commercially
: available, I'd like to purchase rather than build. Alternatively, source
: recommendations (for the coils, filters etc.), proven schematics, advise, etc.
: would be very helpful.

You might try the digicom/baycom hardware modem produtcs. These interface directly into the ibm's parrallel port. They are Bell 202 modems, which

interface with almost ALL radios, with PTT, tx/rx gain controls, and detect led. You can even get software source code off the internet (C source). While the software is made for ax.25 protocol, can easily be adapted for serial or whatever protocol. (it is WELL commented.) Do an archie for pmpsrc*.zip or look on the simtel archives under /packet.

: Also, I've read chunks of CFR 47, and get the impression that 49Mhz would
: be the easiest freq. to deal with, but I would like to get my hands on a
: layman's guide to the subject. Does the ARRL publish anything specific to my
: type of project?

: Thanks in advance,
: Gordon Southam
: southagr@caedm.et.byu.edu

Look for the ARRL Radio Amateur Handbook in your local library. That is THE BIBLE for amateur and layman radio technique.

73's,

De Dan N7NMD

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(((+)))	Dan Zubey N7NMD	...andshethought	! WHENLIFE
	dzubey@enet.net	howwonderfulitw	! GIVESYOU
~~~~~	N7NMD@N7MRP.AZ.USA.NA	ouldbetobecomew	! LEMONS,
AmRC	Cen AZ Red Cross Packet sysop	ise...Gen3.	! MAKEABATTERY

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Date: Sun, 2 Oct 1994 23:51:06 GMT  
From: slay@netcom.com (Sandy Lynch)  
Subject: N0ARY Software

Paul H. White (whitep1@iia.org) wrote:

: If anyone knows where I can get a copy of the latest version  
: Or release of the N0ARY PAcKet BBS software, please let me know  
: by responding in mail. Thanks a bunch!

Hmmmmmm .... how about contacting Bob/N0ARY directly?  
Packet is N0ARY@N0ARY.#nocal.ca.usa.noam  
Email: bob@arasmith.com (I'm pretty sure).

73 de Sandy  
WA6BXH/7J1ABV  
slay@netcom.com

PS: Bob's BBS s/w is unbelievably powerful ....

-----  
Date: Wed, 5 Oct 1994 23:02:04 GMT  
From: jp11@vectorbd.com (Jim Lill)  
Subject: NOS versions

I'd like to compile a list of KA9Q NOS and its variants and their current revs.

Things like JNOS, TNOS, AmigaNOS etc.

Post your inputs here for a few days.... then we can consider filling in holes via mail.

--

~~~~~  
Jim Lill / Vector Board BBS \
jp11@vectorbd.com \ 716-544-1863/2645 /
wa2zkd@wb2psi.#wny.usa.na GENie: ZKD

Date: Thu, 6 Oct 1994 23:27:02 GMT
From: nmcewen@metronet.com (Neal McEwen)
Subject: NOS versions

In message <Cx82nG.45o@vectorbd.com> - jp11@vectorbd.com (Jim Lill) writes:

>I'd like to compile a list of KA9Q NOS and its variants and their
>current revs.

>

>Things like JNOS, TNOS, AmigaNOS etc.

>

>Post your inputs here for a few days.... then we can consider filling

>in holes via mail.

>

it would also be handy to show where the source and
exectuables can be found. also what compiler is required.

let me add to the list, i can research source, etc. later

JNOS by WA3DSP (very stable BTW)

WAMPES

JNOS for Linux

MAC variants

NOS for OS/2 PM, called PMNOS

WNOS (NOS for Windows)

maybe i can think of others later

Neal McEwen K5RW k5rw.ampr.org or
nmcewen@metronet.com

Date: Thu, 6 Oct 1994 23:54:15 GMT
From: mulveyk@kea.lincoln.ac.nz (Kenneth Mulvey)
Subject: Remote Wind Speed Measurement

Hi, We have an application for remote (alpine) wind speed
measurement (exactly windrun per hour). My overall design wud be
freq. modulating an fm carrier consequently demodulating and interfacing
to the pc. My question - what wud be the current state of the art design?
Suggestions and reference to recipes appreciated. TIA. Ken

Date: Thu, 06 Oct 94 15:16:25 EST
From: brad@psrc.wa.com
Subject: Source for TEKK XCVR

Can anyone tell me a US source and approximate price for the TEKK
tranceiver? Thanks to all and best regards...

Also, what is the frequency for the 144mhz and the 440mhz 9600bd TCP/IP
networks in the Seattle area? Can anyone tell me? Is there a 220mhz
9600bd net? Is it OK to run 9600bd on the regular 1200bd frequencies?

--
Brad WB7EJS
brad@psrc.wa.com
--

(standard opinion disclaimer)

Date: 6 Oct 1994 11:11:01 GMT
From: xtof@cs.kuleuven.ac.be (Christophe Huygens)
Subject: Tekk KS900 pinouts

Just received 2 tekks ks900, unfortunately without any docs.

Could someone fax pinouts to + 32 16 20 53 08 or describe them to me?

Top cover (antenna to the left).

most left:
middle (upper):
most right:

9 pin sub D.

1:
2:
3:
4:
5:
6:
7:
8:
9:

I ve found out the rf out myself :-)

Thanks in advance, xtof on1cfx

--

Christophe.Huygens@cs.kuleuven.ac.be

Date: Sun, 2 Oct 1994 21:40:09 GMT
From: jim.ridley@aznetig.stat.com (Jim Ridley)
Subject: THENET X1J2

I am having a problem with the memory deteriorating on a X1J2 firmware. The memory seems to deteriorate worse when large file transfers and etc are being passed. I am using a Tiny II with a DCD board installed. Meter switches have been toggled off. I understand this is somewhat of a common problem and I wonder if anyone has a solution.
Thanks de Jim Ridley (K5LGW)

Date: Wed, 5 Oct 94 23:33:55 -0500
From: Avery Russell <avery125@delphi.com>
Subject: TNC to HTX-202

I will try to use the internal jumpers of the KPC without making the cable with the resistor. Thanks for your input.

Date: 4 Oct 94 12:47:22 MDT
From: greg@radar.safb.af.mil (Greg Horine)
Subject: TNC to HTX-202

>Message-ID: <Rg3Vw14.avery125@delphi.com>
>From: Avery Russell <avery125@delphi.com>
>

>I need to wire a cable to go between my new Kantronics KPC-3 and my
>Tandy HTX-202 hand held. Are there any hidden things I need to know about
>before I damage the HT? Has anyone else made this cable. Please advise.

Avery,

I have an HTX-202 hooked up to a Kantronics KPC-3 and I just used the
drawings for the Icom hook ups. Tandy uses the same accessories as Icom,
including the microphone hook ups.

Greg, N9PBD
15sms24.hqamc@mhs.safb.af.mil

Date: Thu, 6 Oct 1994 11:33:45 GMT
From: barnaby@world.std.com (Richard L Barnaby)
Subject: Wanted: Montreal CA Packet group

The Central Vermont Amateur Radio Club is in the process of establishing
a node on Lincoln Peak in the Green Mountain National forest in Warren
Vermont. We have "heard" that from Lincoln peak on a clear day,
downtown Montreal office buildings have been spotted. One person who
has done "curvature studies" says it's not possible.
We would like to conduct an experiment with interested Canadian packeteers
(this weekend if possible) October 8 or 9 to see if such a far-reach
node could be implemented.
If you or your packet group is interested in this please contact me
via telephone at 802-223-1234 immediately. Time is of the essence, as the
peak will be snowed in any day now, and the research would have to
wait until late spring.

The Peak is 3486 feet above sea level and is at
Latitude North 44-08-25
Longitude West 72-56-03

Tests would include cellular phone, amateur phone, and good telescopes
(if the weather permits)

Richard Barnaby
Co-chairman DIGital committee
CVARC

Worcester, Vermont 05682
802-223-1234 phone
802-223-1917 fax
AA1IB
.

Date: Thu, 6 Oct 1994 13:03:10 GMT
From: barnaby@world.std.com (Richard L Barnaby)
Subject: Wanted: Montreal CA Packet group

barnaby@world.std.com (Richard L Barnaby) writes:

>If you or your packet group is interested in this please contact me
>via telephone at 802-223-1234 immediately. Time is of the essence, as the
>peak will be snowed in any day now, and the research would have to
>wait until late spring.

Even if you \*know\* a call sign or telephone number or name of someone
in Montreal who may \*know\* somebody, please call or email
tx

>Richard Barnaby
>Co-chairman Digital committee
>CVARC
>Worcester, Vermont 05682
>802-223-1234 phone
>802-223-1917 fax
>AA1IB
>.

Date: 6 Oct 1994 07:13:01 -0400
From: thmott@aol.com (Thmott)
Subject: Windows software for Kantronics Kam+

In article <Cx7pMM.BvH@murdoch.acc.Virginia.EDU>,
sem2r@galen.med.Virginia.EDU (Stacey E. Mills) writes:

I have been looking for a good windows-based program for the KAM for a
long time but haven't found one. I think that Logic 4 has a windows
version but I haven't tried it. I tried a demo of Logic 3 that was DOS
based and it wasn't very satisfactory. I haven't tried HamWindows.

If you find a good window-based program, I would like to hear about it. I
am in the process of learning Visual Basic and plan to write one for

myself if I can.

Thurman Mott

End of Ham-Digital Digest V94 #332

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